

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the matter of

Redevelopment of Spectrum to Encourage
Innovation in the Use of New Telecommunications
Technologies

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) ET Docket No. 92-9
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COMMENTS

The Wireless Cable Association International, Inc. ("WCA"), by its attorneys, hereby submits its initial comments in support of the proposals set forth in the Commission's *Notice of Proposed Rule Making ("NPRM")* in this proceeding.¹

With the *NPRM*, the Commission has commenced the laudable, albeit difficult, task of identifying spectrum that appropriately can be reallocated for use by emerging wireless communications technologies. WCA is pleased to see that the Commission has accepted as a fundamental tenets of this proceeding: (i) that no users should be forced to vacate their spectrum unless they "can be relocated to higher frequency bands that provide for similar type services and can support propagation over similar path lengths"² and (ii) that any relocation must be "with a minimum of cost and disruption of service to consumers."³

It is precisely because of these two considerations that WCA wholeheartedly agrees with the Commission's decision to exclude the 2.15-2.16 GHz and 2.5-2.69 GHz bands from consideration for reallocation to services employing new technologies and urges

¹See *Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies*, 7 FCC Rcd 1542 (1992).

²*Id.* at 1544.

³*Id.* at 1543.

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the Commission to expand the exclusion to the entire 2.15-2.162 GHz band allocated to the Multipoint Distribution Service ("MDS").⁴ The 2.15-2.162 GHz and 2.5-2.69 GHz bands are currently allocated to the MDS and the Instructional Television Fixed Service ("ITFS") and are utilized extensively by wireless cable system operators to distribute their programming on a point-to-multipoint basis to consumers. The Commission has recognized that wireless cable represents the most promising technology for bringing immediate competition to traditional coaxial cable monopolies and for providing economical multichannel video distribution in rural areas that the cable industry refuses to serve. As a result, the Commission has devoted a significant amount of time and energy over the past

⁴MDS Channel 2, which is assigned to 21506-2162 MHz, is available for licensing in the 50 large markets listed in § 21.901(c) of the Rules. While historically licensees have been limited merely to a 4 MHz MDS Channel 2A at 2156-2160 MHz in other markets, the Commission has begun to make available a full 6 MHz channel MDS Channel 2 at 2156-2162 MHz in those markets upon a showing of spectrum availability. *See Order to Show Cause To Michiana MetroNet, Inc. for Point-to-Point station WLN-896 at Ft. Wayne, Indiana and Point-to-Point station WLK-941 at Columbia, Indiana*, 7 FCC Rcd 1001 (1992). In so doing, it has been recognized that "[a]uthorization of a MDS Channel 2 would allow the accumulation of an additional channel for video entertainment programming to be distributed by the local wireless cable operator" and that maximizing channel capacity is critical to the success of wireless cable. *Id.* at 1001-1002.

two years to affording wireless cable operators a more accommodating regulatory framework.⁵

The Commission's efforts to promote the emergence of wireless cable have already borne substantial fruit. At present, there are approximately 100 wireless cable systems in operation in the United States, serving close to half a million subscribers. New wireless cable systems are launching weekly, while hundreds of new subscribers are added to existing systems each day. Several hundreds of millions of dollars have already been invested in the wireless cable industry, including substantial contributions of equipment, programming and dollars to the educators who hold ITFS authorizations. As the Commission works through the current backlog of MDS⁶ and ITFS applications, the number of operating wireless cable systems can be expected to increase dramatically, as will the industry's contributors to America's educational community.

In its seminal report, "Creating New Technology Bands for Emerging Telecommunications Technology," the Office of Engineering and Technology ("OET") recognizes not only that there is extensive utilization of the 2.15-2.16 GHz and 2.5-2.69 GHz

⁵See, e.g. *Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting: Private Operational-Fixed Microwave Service, Multichannel Multipoint Distribution Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, and Cable Television Relay Service*, 5 FCC Rcd 6410 (1990)(Report and Order); 5 FCC Rcd 6472 (1990)(Further Notice of Proposed Rule Making); 6 FCC Rcd 6764 (Order on Reconsideration); 6 FCC Rcd 6792 (Second Report and Order); *Definition of Cable Television System*, 5 FCC Rcd 7638 (1990).

⁶See *Amendment of Parts 1, 2, and 21 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands*, FCC 92-173, PR Docket No. 92-80 (rel. May 8, 1992).

bands, but also that there are no alternative frequency allocations able to support these applications and that any change in the frequencies allocated for MDS and ITFS use could prove harmful to the wireless industry's development.⁷ WCA fully agrees with OET's analysis. Alternative spectrum capable of satisfying the needs of the wireless cable industry simply does not exist. Moreover, even if alternative spectrum could be located, it would not be practical even at this early stage in the development of the wireless cable industry to migrate systems to alternative spectrum because of the tremendous amount of installed plant, especially equipment located on subscribers' premises, that would have to be replaced.

Utilities Telecommunications Council ("UTC") has submitted a "Petition for Issuance of Further Notice of Proposed Rulemaking" in this docket in which it questions the validity of OET's analysis of the 2.15-2.16 GHz and 2.5-2.69 GHz bands as possible spectrum for new technologies. WCA intends to respond to UTC more fully at the appropriate time. However, for present purposes it suffices for WCA to note that UTC provides absolutely no technical support for the linchpin of its argument -- its contention that "the ITFS and MMDS licensees that would have to be relocated, and new wireless cable systems, could operate in portions of the 3.7-4.2 (4 GHz), 5.925-6.425 (6 GHz), 10.7-11.7 (11 GHz), 11.7-12.2 (11.7 GHz), 12.2-12.7 (12 GHz), 12.7-13.25 (13 GHz), 17.7-19.7 (18 GHz), 21.2-23.6 (23 GHz) or 27.5-29.5 (28 GHz) GHz microwave bands."⁸

⁷See Office of Engineering and Technology, "Creating New Technology Bands for Emerging Telecommunications Technology," OET/TS 92-1, at 6, 11 (Jan. 1992).

⁸Petition of Utilities Telecommunications Council for Issuance of Further Notice of Proposed Rulemaking, ET Docket No. 92-9, at 11 (filed May 1, 1992)[hereinafter "UTC Petition"].

For example, to support its view that the Commission can move MDS and ITFS facilities to the 7, 13, 18 and 23 GHz bands, UTC proclaims that:

[i]t should be noted that the Commission has already contemplated moving ITFS systems licensed on channel groups E and F to other bands. In its Second Report and Order in Gen. Docket No. 90-54, FCC 91-302, the FCC adopted an involuntary migration plan under which ITFS licensees can be compelled to relocate to another band by MDS/MMDS operators. Thus, arguments that existing ITFS facilities cannot or should not be relocated have already been rejected by the Commission.⁹

UTC's argument, however, grossly mischaracterizes the Commission's *Second Report and Order* in Gen. Docket No. 90-54. At the outset, one need not even review the relevant portions of the *Second Report and Order* carefully to see that the Commission is only addressing the prospects for migrating "the limited number of ITFS point-to-point operations on the E and F channels."¹⁰ Thus, the discussion cited by UTC is of absolutely no relevance to the overwhelming majority of ITFS facilities, which operate on a point-to-multipoint basis. Moreover, contrary to what UTC implies, the Commission did not conclude in its *Second Report and Order* that any alternative band would be suitable for migration of even those few point-to-point ITFS links. To the contrary, the Commission merely found that:

⁹*Id.* at 13.

¹⁰*Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting: Private Operational-Fixed Microwave Service, Multichannel Multipoint Distribution Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, and Cable Television Relay Service*, 6 FCC Rcd 6792, 6798 (1991)(emphasis added).

while the 2, 7 and 13 GHz bands might not be suitable in some areas due to congestion, they may be acceptable in other areas. Similarly, while the 18 and 23 GHz bands may not be usable in some locations due to poor propagation and expensive equipment, they may be adequate in other areas.¹¹

UTC's advocacy of the 28 GHz band as possibly meeting wireless cable needs is equally flawed. UTC does nothing more to bolster its position than to cite to the Commission's decision to authorize Hye Crest Management, Inc. ("Hye Crest") to operate a 28 GHz band cellular video system in New York and the petition by Hye Crest's affiliate, Suite 12 Group ("Suite 12"), for the adoption of rules to govern the use of the 28 GHz band for cellular video distribution.¹² What UTC ignores, however, is that there exist substantial doubts regarding the technical and commercial viability of the 28 GHz band for video distribution.¹³ Indeed, as WCA established in its comments on Suite 12's petition for rulemaking, despite having received several experimental and permanent authorizations from the Commission, Hye Crest and Suite 12 have thus far failed to introduce any field data into the record demonstrating that their cellular video concept can work in a real-world environment.¹⁴

¹¹*Id.*

¹² See UTC Petition, at 17.

¹³ See, e.g. *Hye Crest Management, Inc.*, 6 FCC Rcd 332, 335 (1991) ("there is no guarantee of success for Hye Crest's proposal").

¹⁴ See Comments of Wireless Cable Association, RM-7872 (filed Jan. 15, 1992). If, however, the Commission desires to leave open the possibility of migrating wireless cable operations to the 28 GHz band, it becomes of critical importance that the Commission adopt the procedures proposed by WCA to stem the premature tide of applications for 28 GHz
(continued...)

In short, UTC has not met its burden of demonstrating both: (i) that MDS and ITFS operations can be relocated to higher frequency bands which provide for similar type services and can support propagation over similar lengths; and (ii) that a relocation could be accomplished with a minimum of cost and disruption of service to consumers. Until UTC can demonstrate the feasibility of migrating the wireless cable industry and educational ITFS users to alternative bands, its proposal does not warrant further consideration by the Commission.


¹⁴(...continued)

band authorizations and assure that any licensing of the 28 GHz band is accomplished in a manner designed to advance the public interest. See Letter from Paul J. Sinderbrand to Chairman Alfred C. Sikes (dated Feb. 12, 1992).

WHEREFORE, for the foregoing reasons, WCA urges the Commission to exclude the 2.15-2.162 GHz and 2.5-2.69 GHz bands from those being considered for reallocation to services employing new technologies.

Respectfully submitted,

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